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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,221	05/15/2001	Rolf De Vos	OYJALO-008	5384

530 7590 09/24/2003

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EXAMINER

ALVO, MARC S

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/763,221	DE VOS ET AL.	
	Examiner	Art Unit	
	Steve Alvo	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 1731

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

SIXTA et al in view of AT 403 704 or CHENG or AUSTRALIAN PATENT

APPLICATION 2203/92.

SIXTA et al teaches bleaching medium consistency pulp with ozone gas containing 300 g/m<sup>3</sup> ozone (30% ozone by weight), see column 3, lines 8-9 and lines 23-24; SIXTA et al teaches that the ozone is mixed into the pulp by agitation or mixing and prefers a high shear mixer. However, the other non-preferred mixers of SIXTA et al would not be high shear mixers. AT 403 704 teaches using ozone containing gas to bleach pulp wherein the ozone is added directly to the reactor without mixing. CHENG teaches dispersing chemicals into the liquid without the use of high shear mixers by using a porous metal injector to disperse a gas into a liquid. AUSTRALIAN PATENT APPLICATION 2203/92 teaches the alternativeness of mixing high concentrations of ozone containing gas into pulp with or without high shear mixers (see instant specification, page 2, lines 17-28). It would have been obvious to the artisan to use the ozone/liquid dispersing means of AT 403 704 or CHENG or AUSTRALIAN PATENT APPLICATION 2203/92 to mix the ozone into the liquid pulp slurry of SIXTA et al. It would have been especially obvious that non high shear mixers could be used as the mixer of SIXTA et al as AUSTRALIAN PATENT APPLICATION 2203/92 teaches the alternativeness of mixing ozone gas into medium consistency wood pulp using mixers

Art Unit: 1731

with or without high shear. Generating ozone gas is well known in the ozone bleaching art, if not such is taught by AT 403 704.

Claims 8 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over SIXTA et al in view of AT 403 704 or CHENG or AUSTRALIAN PATENT APPLICATION 2203/92 as applied to claim 7 above, and further in view of EP 526 383.

EP 526 383 teaches generating ozone from pre-compressed oxygen. It would have been obvious to the artisan that the ozone of SIXTA and/or CHENG could have been generated from pre-compressed oxygen in the manner taught by EP 526 383.

When filing an “**Official**” FAX in Group 1730, please indicate in the Header (upper right) “**Official**” for papers that are to be entered into the file. The “**Official**” FAX phone numbers for this TC 1700 are:

**Non-Final Fax:** (703) 872-9310      **After-Final FAX:** (703) 872-9311.

When filing an “**Unofficial**” FAX in Group 1730, please indicate in the Header (upper right) “**Unofficial**” for Draft Documents and other Communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers. The “**Unofficial**” FAX phone number for this Art Unit (1731) is (703) 305-7115.

Any inquiry concerning this communication or earlier communications from the **primary examiner** should be directed to **Steve Alvo** whose telephone number is (703) 308-2048. The Examiner can normally be reached on Monday - Friday from 6:00 AM - 2:30 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Steve Griffin, can be reached on 703-308-1164.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is 703-308-0661.

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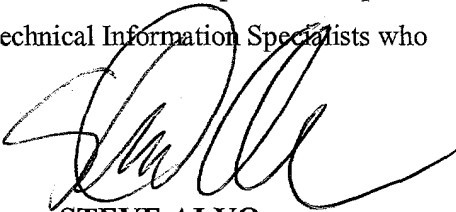
Art Unit: 1731

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MSA  
9/22/03



**STEVE ALVO**  
**PRIMARY EXAMINER**  
**ART UNIT 1731**